



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/588,259

04/06/2007

Edwin Koch

51873

4226

1609

7590

08/14/2009

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

1300 19TH STREET, N.W.

SUITE 600

WASHINGTON,, DC 20036

EXAMINER

SAVAGE, MATTHEW O

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

08/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,259	<b>Applicant(s)</b> KOCH ET AL.	
	<b>Examiner</b> Matthew O. Savage	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8-3-06</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7, 10, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Hundley et al.

With respect to claim 1, Hundley et al disclose a filter element 100 (see FIG. 5) including a filter medium 102-105, which extends between two end caps 110, 111 which are each connected to one assignable end area of the filter medium which is supported at least on one side on a support tube 101, the end caps and end area of the filter medium has a contact-making means (e.g., the conductive adhesive mentioned on lines 9-10 of col. 20) and end caps are made dissipative (see lines 8-9 of col. 20), for purposes of dissipating the electrostatic charges which occur in particular in filter element operation. It is noted that the means language has been construed broadly since the means has been substantially structurally defined in the dependent claims.

Regarding claim 2, Hundley et al disclose the contact-making means as consisting of dissipative contact elements (e.g., the particles of particles of conductive material disposed throughout the conductive adhesive) which penetrate a cement bed (e.g., the non-conductive matrix of the adhesive) which forms a type of insulating layer

Art Unit: 1797

between the end cap and the end area of the filter medium accommodated by the end cap and in this way come into dissipative contact with the filter medium.

As to claim 3, Hundley et al disclose the dissipative end cap as being formed of plastics with a conductivity additive (e.g., the conductive polymer having particles of conductive material mixed therein, see lines 8-9 of col. 20).

Concerning claim 5, Hundley et al disclose the filter medium consists of a pleated or cylindrically shaped filter mat with filter plies in several layers on top of each other which consist entirely or partially of dissipative plastic materials (see FIGS. 1-2).

Regarding claim 6, Hundley et al disclose the filter mat as being reinforced at least on the outer and/or inner peripheral side with fabric materials 11, 14 of plastic or metal.

As to claim 7, Hundley et al disclose the filter medium in the flow direction as being supported on the support tube 101 which is provided with passages and which consists preferably of a plastic material (see lines 12-16 of col. 18).

Regarding claim 10, Hundley et al disclose end caps 110, 111 provided to the inside and outside with at least one respective projecting annular surface each between which the end area of the filter medium can be accommodated (see FIG. 5).

As to claim 11, Hundley et al the respective end cap 131 (see FIG. 7) with the contact-making means as having a connecting part for fixing the filter element in a filter housing 141 and wherein a sealing means 148, especially in the form of an O-ring which is located between the filter housing and the end cap of the filter element, is made dissipative (see lines 22-26 of col. 23).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hundley et al in view of Quaas et al.

With respect to claim 4, Hundley et al fail to specify contact pins which with their one end penetrate in the cement bed, and in the area of the other free end stand vertically upright on the respectively assignable end cap. Quaas et al disclose a contact pins 3 with one end that penetrates a cement bed and with a free end and suggests that such a means ensures electrical contact between an outer surface of a conductive end cap and an end of the filter media. It would have been obvious to have modified the filter of Hundley et al so as to have included the conductive pins 3 as suggested by Quass et al in order to ensure electrical contact between the conductive end cap and end of the filter media.

As to claim 8, Quaas et al disclose the the contact pins 3 as consisting of a conductive metal.

Regarding claim 9, Quaas et al fail to specify arranging the contact pins 3 in concentric circles, however, such a modification would have been obvious in order to ensure uniform contact between the end cap and ends of the filter media in a pleated filter element.

Art Unit: 1797

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew O Savage/  
Primary Examiner  
Art Unit 1797

mos

Application/Control Number: 10/588,259  
Art Unit: 1797

Page 6